SERIAL NO. 3094

ONKYO® SERVICE MANUAL

FULLY AUTOMATIC TURNTABLE
MODEL CP-1011F

D model

TABLE OF CONTENTS

Item	Page
Specifications	2
Attaching the cartridge	2
Exploded view	3
Adjustment procedures	7
Printed circuit board view	8
Schematic diagram	9
Packing procedures	10

ONKYO®
AUDIO COMPONENTS

SPECIFICATIONS

Type:	2-speed fully automatic turntable
Turntable Platter:	30 cm (12") aluminum diecast
Motor:	Electronic servo DC motor, belt drive
Speeds:	33-1/3 rpm, 45 rpm
Speed Controls:	Adjustable range ±3%
Wow & Flutter:	0.05% (WRMS)
Signal-to-Noise Ratio:	67 dB (DIN B)
Tonearm:	Lightweight straight-line static balanced pipe tonearm with detachable headshell (ADC type connector) and counterweight with direct tracking force read out.
Suitable Cartiridge Weight:	5 – 9 grams
Adjustable Range:	3 grams
Maximum Length:	270 mm (10-5/8")
Effective Arm Length:	213 mm (8-3/8")
Overhang:	14 mm (9/16")
Maximum Tracking Error:	+3 degrees, −1.5 degrees (offset angle 21 degrees)

Cartridge (G/W model)

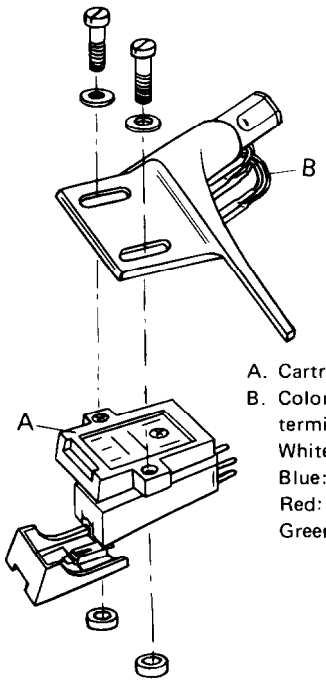
Type:	Moving magnet type (OC – 51M)
Frequency Response:	20 Hz ~ 20,000 Hz
Recommended Load Impedance:	47 kohms
Recommended Tracking Force:	2 grams
Compliance:	8×10^{-6} cm/dyne
Output Voltage:	3.5 mV
Stylus Tip:	0.5 mil diamond
Replacement Stylus:	DN-51ST
Power Supply:	AC110-120, 220-240V, 50/60Hz (W model) AC120V, 60Hz (D model) AC 220V, 50Hz (G model)
Power Consumption:	3 Watts
Dimensions:	418(W) x 371(D) x 140(H) mm (16-1/2" x 14-1/2" x 5-1/2")
Weight:	4.5kg (9.9 lbs.)

Optional Recommended Headshell SH-21E

In the interest of further product improvements, specifications are subject to change without notice.

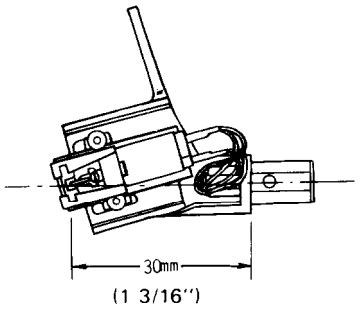
ATTACHING THE CARTRIDGE

Attach the cartridge as shown below, connecting each of the color coded lead wires to the proper terminal. If a mistake is made, no sound will be heard or stereo reproduction will be lost. Also, to prevent damage to the stylus during installation operations, leave its cover on or remove the stylus completely.

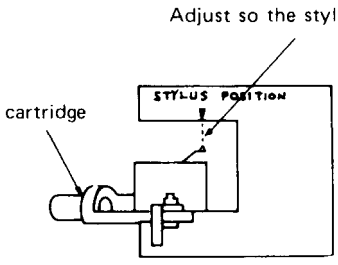


A. Cartridge
B. Colors of the headshell lead wires and cartridge terminals:
White: left channel signal (L)
Blue: left channel ground (LE or LG)
Red: right channel signal (R)
Green: right channel ground (RE or RG)

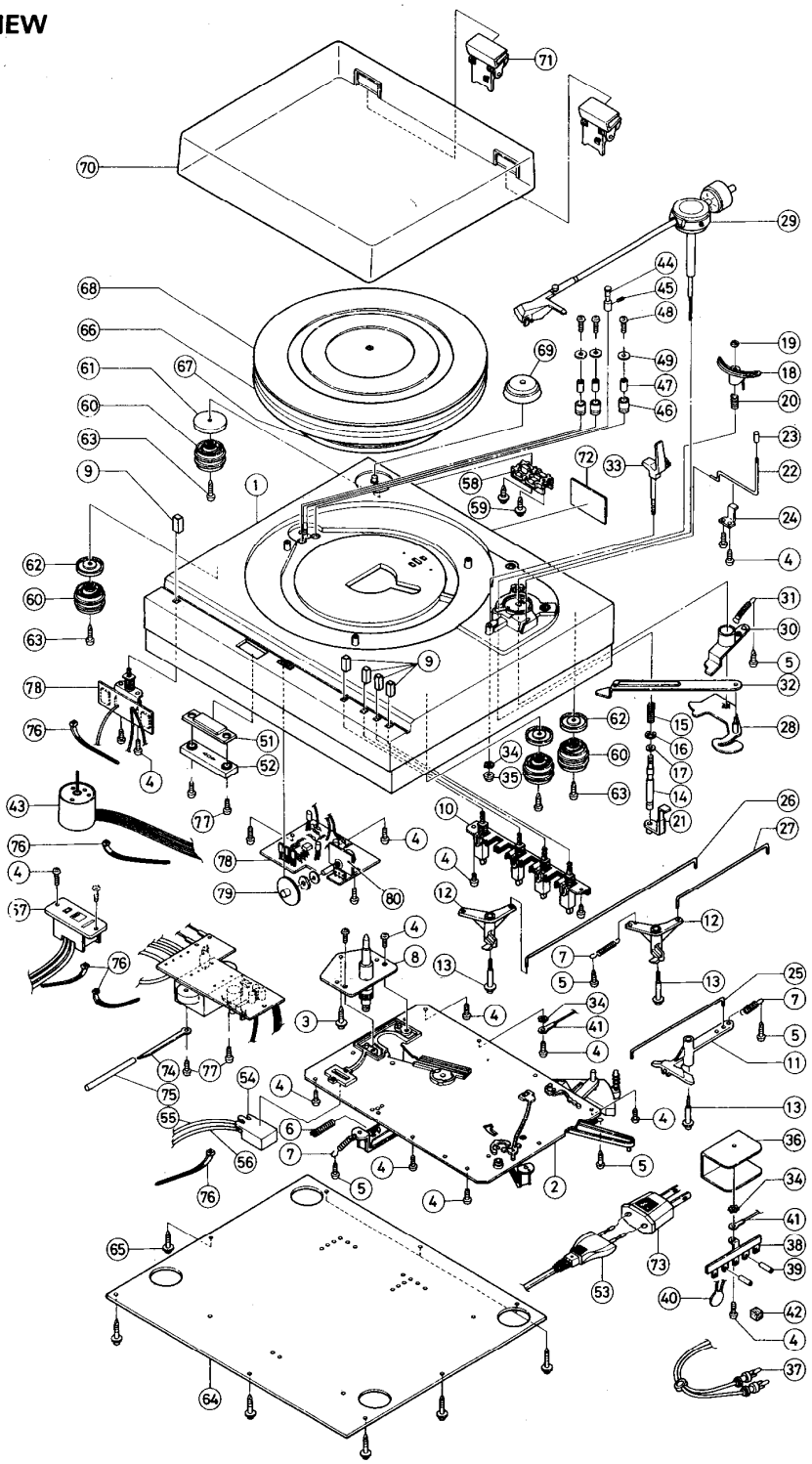
Adjust so the distance between the stylus tip and the base of the headshell is 30 mm (1 3/16") and tighten the screws. This assures the effective length and overhang of the tonearm are correct.



Use the included overhang gauge as shown below, placing the cartridge in the gauge and setting the location of the stylus tip as indicated.

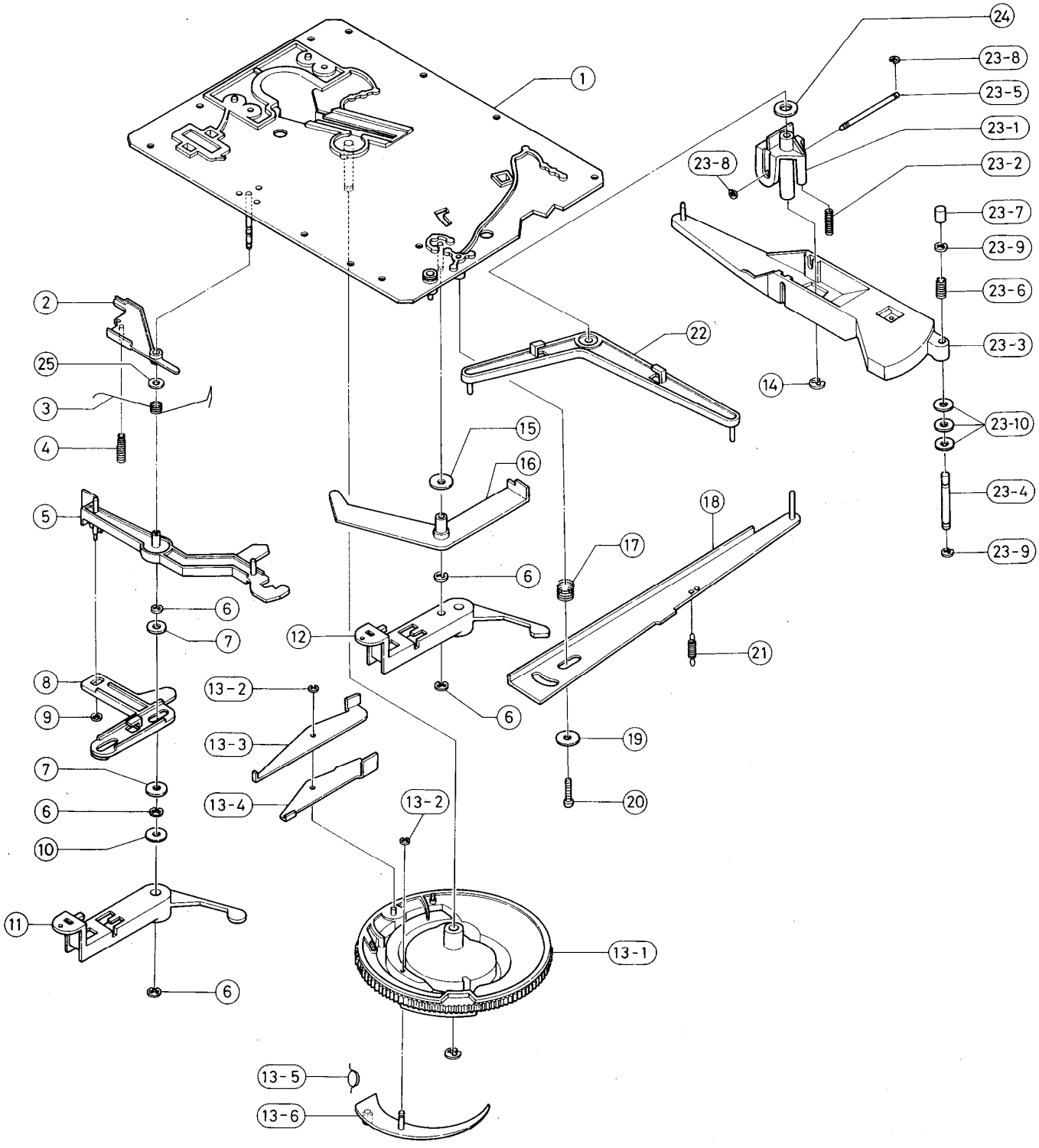


EXPLODED VIEW



REF. NO.	PARTS NO.	DESCRIPTION
1	24509226	Cabinet ass'y
2	24506475	Mechanism chassis
3	831130082	TPT+3x8, Screw
4	838130082	BT+3x8, Screw
5	834130122	FMT+3x12, Screw
6	24506519	Spring
7	24503053	Spring, start lever
8	24506496	T.T. shaft ass'y
9	28320303	Button
10	24503105	Push switch
11	24506498	Start cam
12	24506499	Cam
13	24506523	Special screw
14	24506503	Shaft, elevation
15	24504279	Spring, elevation
16	893030	E-3, Circlip
17	24506506	4,7φ x 8φ x 0.5t, Nylon washer
18	24506504	Plate, elevation
19	24506275	Nut
20	24503075	Spring, cam
21	24506505	Lifter arm
22	24506507	Cue lever
23	24506399	Knob, lifter lever
24	24506508	Pressure plate, lever
25	24506513	Rod, selector
26	24506514	Rod, selector
27	24506515	Rod, selector
28	24506509	Tonearm base
29	24501349	Tonearm ass'y
	24501350	Counter weigh.
	24501354	Headshell
29	24501321	Screw, tonearm
	24501346	OC-51M, Cartridge (G/W)
	24501308	DN-51ST, Stylus (G/W)
30	24506510	Selector
31	24500771	Spring, start lever
32	24506511	Actuating slide
33	24506516	Arm rest
34	87313008	TOW-3, Toothed washer
35	86213010	M3, Nut
36	24506032	Shielded plate
37	24505126	Output cable
38	24506034	Terminal
39	24505012	Tube
40		0.005μF, 50V, Ceramic capacitor
41	24505143	Cable
42	24509104	Mounting stud
43	24502116	Motor with pulley
44	24502115	Pulley
45	801161	T-2x3, Screw, pulley
46	24502060	Cushion, motor
47	24506190	Pipe
48	82112612	FM+2.6x12, Screw
49	87613013	FW3x13x0.8t, Washer
51	24504308	Cover, L.E.D.
52	24504307	Guide, L.E.D.
53	24505076	Power supply cable (D)
	24505068	Power supply cable (G/W)
54	24503023	Micro switch
55		Cable
56		Cable
57		Voltage selector (W)
58	24506517	Holder
59	831130122	TPT+3x12, Screw
60	24509144	Leg
61	24509196	Plate, leg
62	24509227	Plate, leg
63	833140162	FMT+4x16, Screw
64	24509219	Bottom board
65	831140125	4STW+12B, Tapping screw
66	24502117	Turntable platter
67	242129B	Belt
68	24509111B	T.T. sheet
69	242049A	45 rpm adaptor
70	24509215	Dust cover
71	28180062	Hinge
72		Rating label
73		Conversion plug (W)
74	251073	Terminal
75		Tube
76		Binder
78		P.c.b. ass'y
	24505134	L.E.D. and motor control p.c.b.
	24505132	Speed selector switch p.c.b.
	24505138	Power supply p.c.b. (D)
	24505142	Power supply p.c.b. (G)
	24505139	Power supply p.c.b. (W)
79	24506512	Knob, volume
80	24506521	Bracket, volume
		D: Only 120V model
		G: Only 220V model
		W: Only 110/120, 220/240V model

MECHANISM-EXPLODED VIEW



REF. NO.	PARTS NO.	DESCRIPTION
1		Sub-chassis ass'y
2	24506477	Clutch lever
3	24506478	Spring, clutch lever
4	24503029	Spring, clutch lever
5	24503079	Switch lever (2)
6	893030	E-3, Circlip
7	24506480	FW4.7ϕx12ϕx0.5^t, Washer
8	24506518	Repeat lever
9	24506482	CSTW-2.4, CS ring
10	24506483	FW4.7ϕx12ϕx0.3^t, Washer
11	24506484	Start lever
12	24506481	Repeat lever
13	24500747	Main gear ass'y
13-1		Main gear

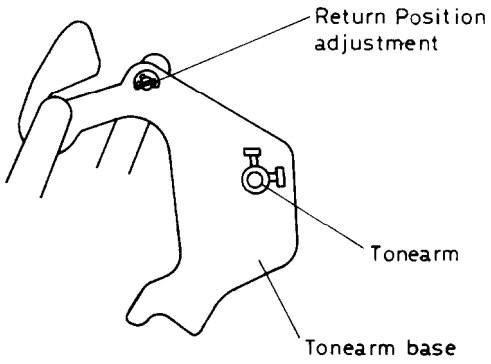
REF. NO.	PARTS NO.	DESCRIPTION
13-2	893020	E-2, Circlip
13-3	24506099	Clutch plate
13-4	24500405	Guide, clutch plate
13-5	24501012	Spring
13-6	24500338	Lever
14	893040	E-4, Circlip
15	24506485	FW4.7ϕx12ϕx0.8^t, Washer
16	24500408	Guide, selector
17	24506486	Spring
18	24500301	Arm, selector
19	24506487	FW3.2ϕx13ϕx0.8^t, Washer
20	833130162	FMT3x16, Screw
21	24503054	Spring, selector arm
22	24506488	Lever, switch

REF. NO.	PARTS NO.	DESCRIPTION
23	24506489	Rotation plate ass'y
23-1		Base
23-2	24506491	Spring
23-3	24506492	Rotation plate
23-4	24506493	Shaft, friction
23-5	24501019	Shaft, plate
23-6	24506494	Spring, friction
23-7	24500516	Friction rubber
23-8	893020	E-2, Circlip
23-9	893030	E-3, Circlip
23-10	24506495	4.7ϕx10ϕx0.5^t, Fiber washer
24	24506501	FW6.2ϕx12ϕx0.3^t, Washer
25	24506502	FW6.2ϕx12ϕx0.2^t, Washer

ADJUSTMENT PROCEDURES

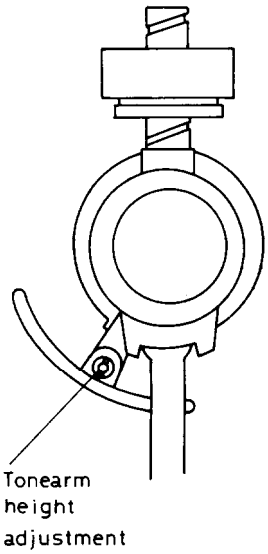
1. Auto-return position

Adjust the return position by the eccentric pin attached by the tonearm base. To adjust the return position for faster, turn the eccentric pin clockwise. To adjust the return position for later, turn the eccentric pin counter-clockwise.



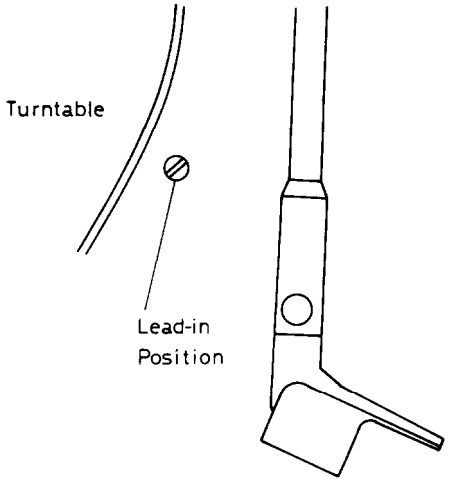
2. Tonearm height

1) Press the record size selector to 17cm position and the power switch to the ON position.
2) Press the play button.
3) As soon as the tonearm comes over the turntable platter, press the power switch to the off position.
4) Adjust the screw on the lifter plate for 12±1mm height between the stylus tip and the turntable platter mat.
   Note: To adjust the height for lower, turn the screw clockwise. To adjust the height for highter, turn the screw counter-clockwise.



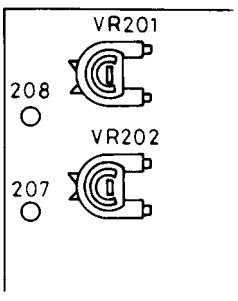
3. Lead-in position

Remove the rubber cap. Press the record size selector to 30cm position and the speed selector to 45 r.p.m.
To adjust lead-in position for faster (outside), turn the eccentric pin clockwise. To adjust the lead-in position for later (inside), turn the eccentric pin counter-clockwise.

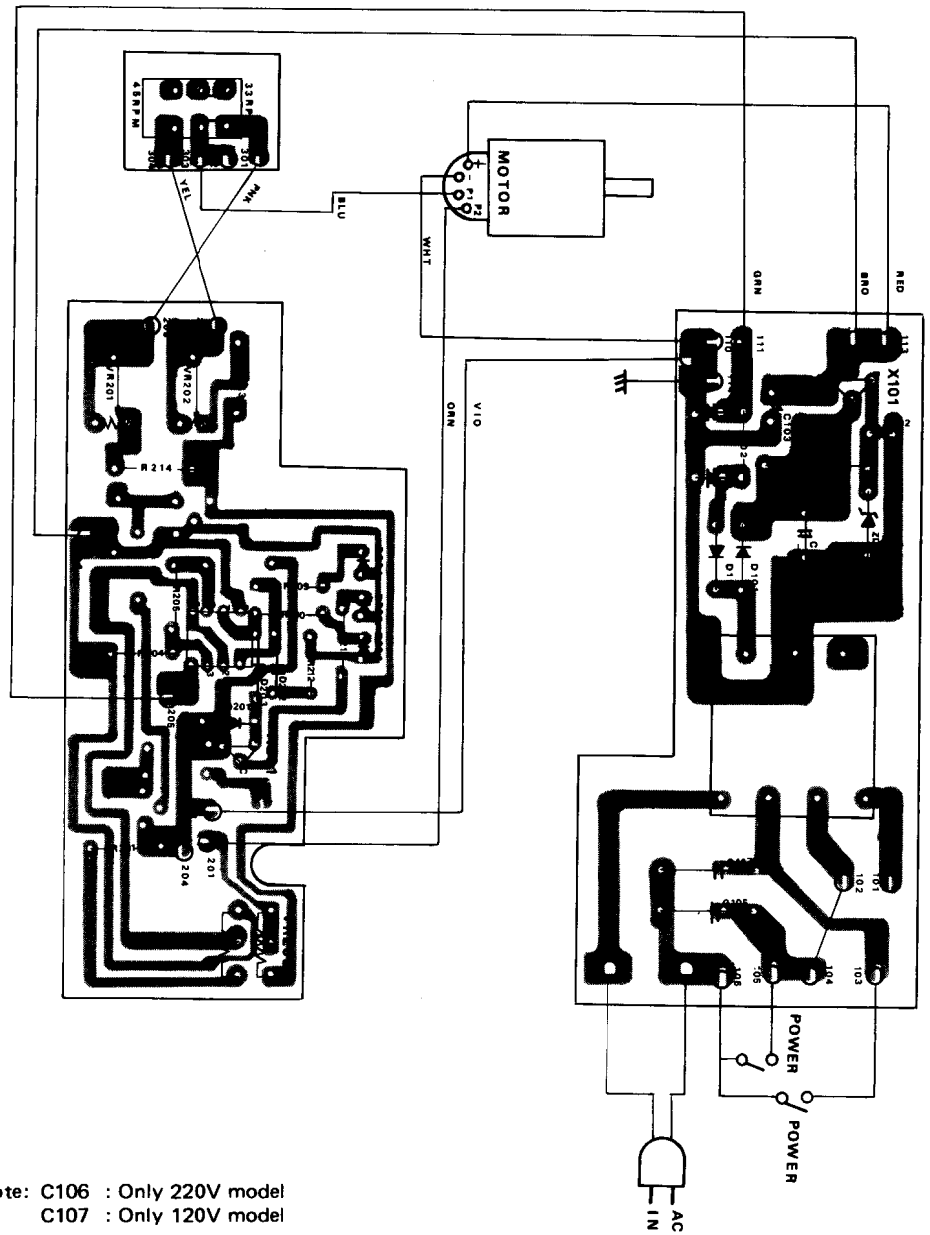


4. Speed control

1) Put the stroboscope on the turntable platter.
2) Set the speed control so that the center L.E.D. lights up.
3) Press the speed selector switch to 33 r.p.m., and adjust VR201 so that the stroboscope stripes appear to be stationary.
4) Then switch over to 45 r.p.m., and adjust VR202 to obtain the same stationary stroboscope condition.



PRINTED CIRCUIT BOARD VIEW FROM BOTTOM SIDE



Note: C106 : Only 220V model
C107 : Only 120V model

POWER SUPPLY PC BOARD

CIRCUIT NO.	PARTS NO.	DESCRIPTION
	Transistor	
X101	2211682 or	2SD468(B) or
	2211683	2SD468(C)
	Diodes	
ZD101	223963	RD12EB1
D101	223851	W03(B)
D102	223104	1S953
	Resistor	
R101	441622714	270Ω, 1W, Metal oxide film
	Capacitors	
C101	352744711	470μF, 16V, Elect.
C102-C105	352744701	47μF, 16V, Elect.
C106	3500063	0.047μF, 250V, IS (G/W model)
C107	3500060	0.01μF, 125V, CS (D model)
	Power transformer	
PT101	230448	NPT-720D, D model
	230449	NPT-720G, G/W model
	Power supply cable	
A101	24505076	D model
	24505068	G/W model

INDICATOR AND MOTOR DRIVE CIRCUIT PC BOARD

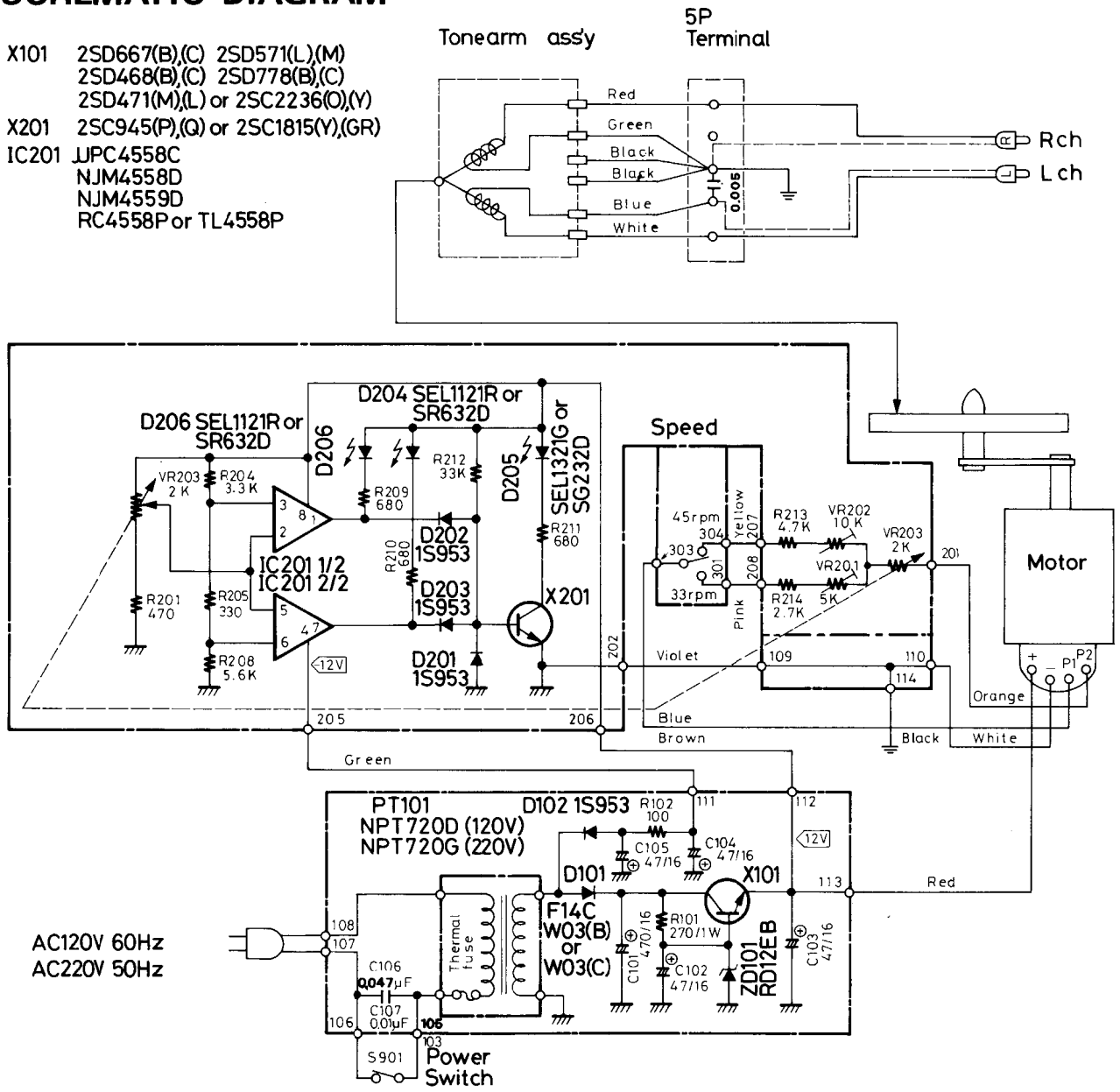
CIRCUIT NO.	PARTS NO.	DESCRIPTION
	IC	
IC201	222465	NJM4558D
	Transistor	
X201	2210353 or	2SC945(P) or
	2210354	2SC945(Q)
	Diodes	
D201-D203	223104	1S953
D204, D206	225049 or	SEL-1121R(B) or
	225050	SEL-1121R(C)
D205	225051 or	SEL-1321G(B) or
	225052	SEL-1321G(C)
	Resistors	
VR201	24509229	VZ083L1 5K, Semi-fixed
VR202	24509230	VZ083L1 10K, Semi-fixed
VR203	5148054	N16RG2KB15, Speed control variable

SPEED SELECTOR PC BOARD

CIRCUIT NO.	PARTS NO.	DESCRIPTION
SW301	25035189	Speed selector

SCHEMATIC DIAGRAM

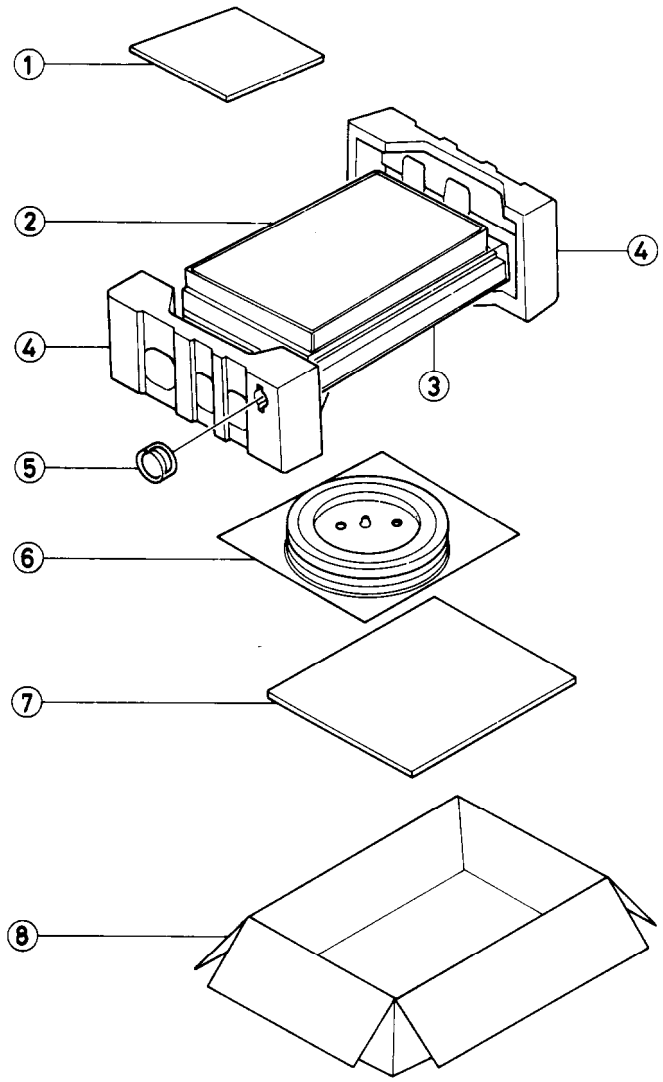
X101 2SD667(B),(C) 2SD571(L),(M)
2SD468(B),(C) 2SD778(B),(C)
2SD471(M),(L) or 2SC2236(O),(Y)
X201 2SC945(P),(Q) or 2SC1815(Y),(GR)
IC201 JJPC4558C
NJM4558D
NJM4559D
RC4558P or TL4558P



NOTE:
1. ALL RESISTORS ARE IN OHMS, ¼WATT UNLESS OTHERWISE NOTED.
2. ALL CAPACITORS ARE IN μF, 50WV UNLESS OTHERWISE NOTED.
3. ELECTROLYTIC CAPACITORS (⊣⊢) ARE IN μF/WV.
4. VOLTAGE IS MEASURED WITH V.T.V.M. WHEN TONEARM IS IN REST POSITION.
5. CIRCUIT IS SUBJECT TO CHANGE FOR IMPROVEMENT.
6. C106 : Only 220V model
   C107 : Only 120V model

ONKYO CORPORATION

PACKING PROCEDURES



D Model

REF. NO.	PARTS NO.	DESCRIPTION
1		Accessary bag ass'y
	292049A	45 r.p.m. adaptor
	24509197	Overhang gauge
	24501330	Cartridge mounting part ass'y
	29340459	Instruction manual
	29365006	Warranty card (Only U.S.A. model)
	29358002	Service station list (Only U.S.A. model)
	29100005	220x330mm, Poly bag
2	29100050	Protection sheet
3	29095012	Protection sheet
4	24509223	Pad
5	24501350	Counter weight
	29100002	30x150mm, Poly bag
6	24502117	Turntable platter
	242129B	Belt
	24509111B	T.T. mat
	29100046	370x470mm, Poly bag
7	24509224	Pad sheet
8	29050394	Master carton box

G/W Model

REF. NO.	PARTS NO.	DESCRIPTION
1		Accessary bag ass'y
	292049A	45 r.p.m. adaptor
	29340460	Instruction manual
	29365005-2	Warranty card (Only Germany model)
	29100005	220x330mm, Poly bag
2	29100050	Protection sheet
3	29095012	Protection sheet
4	24509223	Pad
5	24501350	Counter weight
	29100002	30x150mm, Poly bag
6	24502117	Turntable platter
	242129B	Belt
	24509111B	T.T. mat
	29100046	370x470mm, Poly bag
7	24509224	Pad sheet
8	27050394	Master carton box

Notes: D --- 120V model G --- 220V model W --- 110 ~ 120/220 ~ 240V model

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